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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,895	11/02/2001	Oleg Awsienko	884.660US1	7242

7590 07/28/2006

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EXAMINER

MEHRA, INDER P

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/005,895	Applicant(s) AWSIENKO ET AL	
	Examiner Inder P. Mehra	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-59 is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed 1/5/06. Out of claims 1-41, claims 14-41 are cancelled, and claims 42-59 are added.

Specification

2. The disclosure is objected to because of the following informalities:

Refer to page 3 line 17. What is "3GIO"? Applicant has not responded to the question as to what this acronym stand for and its importance in the context of this invention.

Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by **Goosman et al** (US Patent No. 7,020,697), hereinafter, Goodman.

For claims 1, Goodman discloses "a multiple-domain processing system",
(two inter networks 102 and 104, refer to fig. 4); comprising:

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- a first processing domain having a first host processor and at least one first end node **(Goodman discloses in fig. 4, network 102 with client 78 as node, refer to col. 70 lines 33-46);**
- a second processing domain having a second host processor (100) and at least one second end node (78); (refer to fig. 4 , col. 71 lines 2-28); and
- a multi-dimensional switching fabric, coupled to said first processing domain and said second processing domain to provide peer-to-peer packet communication within said processing system on multiple orthogonal planes, a first plane providing intra-domain packet communication and a second plane providing inter-domain packet communication, **((Goodman discloses in fig. 4, “the intranet connection 106 allow the computing resources of the second enterprise location 104 to be shared or connected with the computing resources available at the first enterprise location 102”, refer to col. 71 lines 23 -26)**

For claims 2-3, Walker discloses, “wherein: said first host processor includes a tightly-coupled processor complex **(Goodman discloses, “the intranet connection 106 allow the computing resources of the second enterprise location 104 (processor with memory) to be shared or connected with the computing resources available at the first enterprise location 102 (processor with memory)”, refer to col. 71 lines 23 -26)**

For claims 4, Walker discloses, “wherein said multi-dimensional switching fabric

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includes at least one local switch associated with said first processing domain, at least one local switch associated with said second processing domain, and at least one global switch to provide packet communication between said first and second processing domains”, **(the intranet connection 106 (Global switch) allow the computing resources of the second enterprise location 104 to be shared or connected with the computing resources available at the first enterprise location 102”, refer to col. 71 lines 23 -26)**

For claims 5, Walker discloses, “wherein: said at least one local switch associated with said first processing domain includes local packet routing information and global packet routing information”, **(the intranet connection 106 (Global switch) allow the computing resources of the second enterprise location 104 to be shared or connected with the computing resources available at the first enterprise location 102”, refer to col. 71 lines 23 –26)**

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman, as above, in view of Walker.

For claims 6-7, Goodman discloses all the limitations of subject matter with the exception of the following limitations, which are disclosed by Walker as follows:

- For claims 6-7, Walker discloses, “wherein: said local packet routing information includes a local lookup table and said global packet routing information includes a global lookup table, as recited by claim 6, wherein: said local packet routing information includes memory map information and said global packet routing information includes a global lookup table as recited by claim 6, (**"client list" maintained in this router, refer to col. 7 lines 18-20, and maintains a list of some of the nodes, col. 7 line 60 through col. 8 line 10.**) .
- For claims 8, 10, and 12, Walker discloses, “wherein: said at least one local switch associated with said first processing domain selects, based on information within a received packet, either the local packet routing information or the global packet routing information for use in routing the received packet”, refer to col. 5 lines 40-55, and abstract, fig. 1, col. 4 lines 40-45, and col. 1 lines 52-67 .
- For claim 11, wherein said at least one global switch includes global packet routing information for use in routing a received packet based on destination domain information within the received packet, refer to col. 1 lines 60-67.
- For claims 13, Walker discloses, “wherein: said first host processor includes a packet generator to generate a packet for delivery to a destination node that includes information identifying a plane within the multi-dimensional switching fabric in which the packet is to be routed”, refer to col. 4 lines 44-46.

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It would have been obvious to a person of ordinary skill in art to combine the capability of above claims into the capability of Goodman. These capabilities can be combined at the local switch and global switch as taught by Walker. The suggestion to do so is motivated to regulate traffic across multi-domains

7. Claim 9, is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman in view of Walker, as in claim 1 above, in view of Nabkel et al (US Patent No. 6,674,725), hereinafter, Nabkel.

For claims 9, Goodman in view of Walker discloses all the limitations of subject matter, with the exception of the limitation, “wherein: said information within said received packet includes a local/global flag”, which is disclosed by Nabkel (the establishment of global policies that inhibit or flag (i.e., set an alarm) the relaying of particular messages, refer to col. 20 lines 40-45).

It would have been obvious to a person of ordinary skill in art to combine the capability of packet including a local/global flag. This capability can be combined at the global switch as taught by Nabkel. The suggestion to do so is motivated to regulate traffic across multi-domains

Allowable Subject Matter

8. Claims 42-59 are allowed.

REASONS FOR ALLOWANCE

9. The following is an examiner’s statement of reasons for allowance:

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The prior art of record does not teach or suggest directly or indirectly the following limitations in combination with other limitations of the claims:

As recited by claim 42

“a third plane providing communication among the plurality of processing subsystems”

As recited by claim 53,

“receiving an information packet at a multi-directional switching fabric;

determining whether the information packet is to be transmitted on a first plane or a second plane”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Response to Arguments

Applicant's arguments filed 1/5/06 have been fully considered but they are not persuasive.

Applicant maintains that the above response provides an adequate clarification to the question presented in the above mentioned prior office action "What is '3GIO'?" The above quoted portion of Applicant's disclosure describes 3GIO as a switching fabric technology, along with Rapid I/O and HyperTransport. Persons of ordinary skill in the pertinent art would recognize and understand the term 3GIO.

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In response, examiner responds, "what this acronym stands for?" No where in specification is it explained as to what this acronym stands for.

Applicant argues that the Office Action has failed to establish a prima facie case of anticipation in that Walker et al. does not disclose each and every element of claims 1-8, 10-13, 42-49, and 51-58 as arranged in the claims.

Applicant further, argues that Walker et al. fails to disclose "peer-to-peer packet communication within said processing system on multiple orthogonal planes" including a first plane and a second plane, as recited in claim 1. Walker et al. also fails to disclose "peer-to-peer packet communication within the system on multiple orthogonal planes including a first plane and a second plane and a third plane, as recited in claim 42. Further, Walker et al. discloses transmitting data packets in both directions over a switched virtual circuit, but fails to disclose "determining whether the information packet is to be transmitted on a first plane or a second plane; and transmitting the information packet on the first plane or the second plane" as recited in claim 53.

In response, examiner states that Goodman (US Patent No. 7,020, 697) discloses, in reference to fig. 4, LAN 102 and LAN 104 as two separate planes exchanging information via internet connection 106, refer to col. 71 lines 19-27. Goodman teaches "peer to peer" communication between planes 102 and 104, as well as various other internet connections. As further illustrated in FIG. 4, a second business enterprise location 104 may be connected with the first enterprise location 102 using a intranet connection 106. Those skilled in the art

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would recognize that various intranet connections 106 exist and may be used in the present invention. As those skilled in the art would recognize, the intranet connection 106 allow the computing resources of the second enterprise location 104 to be shared or connected with the computing resources available at the first enterprise location 102. Several other enterprise locations may be connected with the netcentric computing system 10.

In light of explanation by applicant, arguments by applicant are not persuasive.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder P Mehra 7/16/06

Inder P Mehra
Examiner
Art Unit 2617



JOHN PEZZLO
PRIMARY EXAMINER